



*Mobility and Firepower
for America's Army*



TACOM - ARDEC SUPPORT TO MILITARY OPERATIONS ON URBAN TERRAIN (MOUT)

COL Gary E. Payne

22 June 1999

Committed To Excellence



AMC

A COMMON VISION



TACOM - ARDEC

Taking America's Army into the 21st Century **Army Vision**

The World's Best Army, a full spectrum force-trained and ready for victory. A Total Force of quality soldiers and civilians:

- A values-based organization
- An integral part of the Joint Team
- Equipped with the most modern weapons and equipment the Country can provide
- Able to respond to our Nation's needs
- Changing to meet challenges of today . . . tomorrow . . . and the 21st Century.

Tank-automotive & **A**rmaments **COM**mand

- **To make the technology and sustainment systems work for soldiers through the seamless integration of S&T, R&D, Acquisition, Log Sustainment and Soldier Readiness.**
- **To create a business environment at TACOM where every associate understands the requirement to control costs and manage from the customer perspective and understands their inherent responsibility to do so.**

Army Materiel Command Strategic Vision

The leader in equipping and sustaining America's Army through superior technology and responsive support assuring worldwide power projection and decisive victory



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TACOM MISSION



-To Generate Warfighting Capability for the Army

-To Sustain the Warfighting Readiness of the Army

-To manage the Army's Investment in S&T, R&D and Sustainment for the Army

**3,341 Weapon Systems
34,138 NSNs
300 Systems in Acq Pipeline**

**-Serve as the Life Cycle Manager and Integrator
for Ground Combat Equipment**

Tank-automotive & Armaments COMmand

**Research, Develop, Field and Support
Mobility and Armament Systems Total Life Cycle
To Support Army Readiness**

Combat Vehicles
Tactical Vehicles
Trailers
Construction Equipment
Materiel Handling Equipment
Tactical Bridges

Fuel & Water Distribution Eqpt
Sets, Kits & Outfits
Shop Equipment
Chemical Defense Equipment
Howitzers
Large Caliber Guns

Mortars
Rifles
Machine Guns
Ammo
Aircraft Armaments
Demolitions & Explosives
Rail
Watercraft
Petro & Lub Eqpt

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WHY MOUT EMPHASIS ?



- ▲ 1994 Military Operations in Built-up Areas (MOBA) Study, U.S. Forces Vulnerable in MOUT
- ▲
- ▲ Difficulties Include: Modern Construction with Reinforced Walls, Densely Compacted Areas, High Rise Buildings, Electro-magnetic Interference, Non-Combatants and Restrictive Rules of Engagement, Reduced Line of Sight
- ▲
- ▲ Led to MOUT-ACTD, First Funded FY97



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PRIORITIZED “ENGAGEMENT” REQUIREMENTS



TACOM - ARDEC

- R25 **Non-lethal** - Family of Tools for Variety of Scenarios
- R16 **Defeat Booby Traps** - Detect and Disarm Booby Traps and Mines
- R27 **Demolitions** - Man-sized Hole in Concrete, Direct Application
- R29 **Precision Mortar** - Multi-spectral Smoke, NL and IR Illumination
- R30 **Non-Explosive Door Breach** - Quiet/Stealth & Quick Shoot-Through
- R34 **Soft Grenade** - Incapacitates but Limits After Effects (Flash Bang)
- R37 **Point Munition** - Defeat Vehicle, Bunker, Wall; Remote Fire
- R31 **NL Training Munition** - Safe, Blunt Impact Ammo For 5.56mm
- R21 **Hands Free Sling** - M16, M4 and M249
- R8 **Remote Marking** - Buildings, Walls, Vehicles, Personnel
- R24 **Soft Round** - Provides Incapacitation but Limits Behind Wall Effects

Green - Success

Red - Gov/Industry Challenge

ACTD

Blue - Partial Solution

Black - Not Evaluated Under MOUT-



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GOVERNMENT/INDUSTRY CHALLENGE



TACOM - ARDEC

- ▲ Meeting Requirements Is Our Challenge
- ▲ MOUT-ACTD Provides Excellent Start
- ▲ Remaining Challenges = Opportunities
- ▲ Industry Involvement Critical To Meeting Remaining Challenges



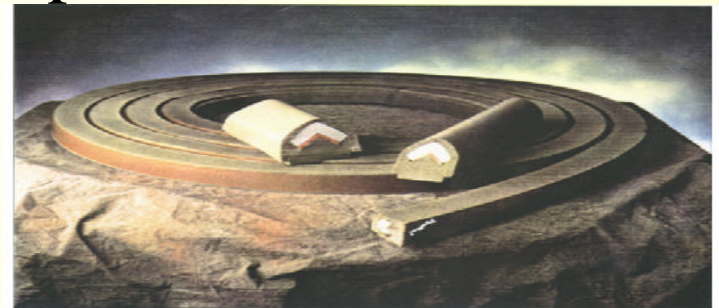
PROMISING MOUT-ACTD ENGAGEMENT SOLUTIONS



- ▲ Soft Grenade (R34) - Flash Bang
- ▲
- ▲ Non-Explosive Breach (R30) - Rifle Launched Entry Munition (RLEM) →



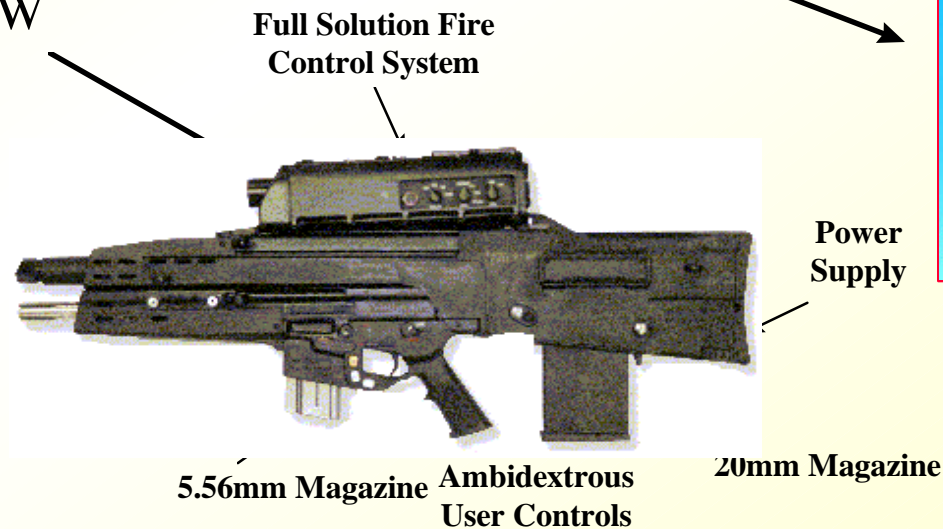
- ▲
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- ▲ Breach Concrete Wall (R27) - Explosive Blanket, Explosive Cutting Tape →





POST-MOUT-ACTD DEVELOPMENTAL SOLUTIONS

- ▲ Non-Lethal
- ▲ Recoilless Rifles; Large and Small Caliber
- ▲ Rifle Grenades
- ▲ Improved Shoulder Launched Weapons (MISER, Enhanced Warhead BDM)
- ▲ Virtual Reality Modeling
- ▲ Precision Guided Mortar Munition (PGMM)
- ▲ OICW/OCSW





TACOM - ARDEC PLAN



- ▲ Develop Capability Matrix
 - TACOM-ARDEC Materiel
 - Joint Services
 - National Labs
 - Industry
- ▲ Revisit Requirements Within Joint User/Developer Community (CY99)
 - Expand/Refine
 - Industry Day - 2Q00, To be announced in CBD
- ▲ Develop Coordinated Materiel Solution Priorities Matrix
- ▲ Seek Funds/Execute Programs



SUMMARY



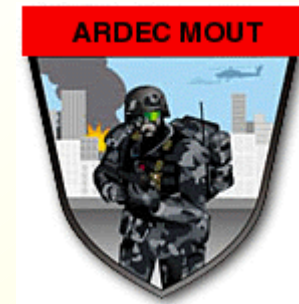
- ▲ TACOM - ARDEC Has Lead on Engagement
- ▲ Coordinate and Focus Future Efforts
 - New/Revised Requirements
 - POST-ACTD Challenges
- ▲ Industry Involvement Critical



TACOM - ARDEC MOUT WEBSITE



Military Operations On Urban Terrain (MOUT) Team



 [**w3.pica.army.mil/ccac/ccl/mout**](http://w3.pica.army.mil/ccac/ccl/mout)